Remarks

In the Non-Final Office Action dated December 4, 2009, it is noted that claims 1 and 3-14 are pending in this application; that claims 10-11 are objected to for reciting the phrase "capable of"; that claim 4 stands rejected under 35 U.S.C. §112, second paragraph; and that claims 1 and 3-14 stand rejected under 35 U.S.C. §103.

Claim 1 has been amended to clarify an aspect of the present invention. This amendment is supported at least by the original specification related to Figure 2 as it shows operations performed by the access point. Claim 4 has been amended to correct an inadvertent error with respect to antecedent basis. Claims 10 and 11 have been amended to recite the phrase "configured for" rather than "adapted to". No new matter has been added.

Objection to Claims 10-11

Claims 10 and 11 have been objected to under M.P.E.P. §2111.04 for reciting the phrase "capable of". As shown in the amendments to the claims above, claims 10 and 11 now use the phrase "configured for" as suggested by the Examiner. It is therefore believed that the grounds of objection have been obviated with respect to amended claims 10 and 11. Withdrawal of this objection is respectfully requested.

Rejection of Claim 4 under 35 U.S.C. §112

Claim 4 stands rejected under 35 U.S.C. §112, second paragraph, for lacking sufficient antecedent basis for the term "the received packet". According to the amendments to claim 4 shown above, this term has been changed to recite "the received data frame" for which sufficient antecedent basis already exists. It is submitted that amended claim 4 is clear, definite, and allowable under 35 U.S.C. §112. Withdrawal of this objection is respectfully requested.

Cited Art

The following references have been cited and applied in the present Office Action: U.S. Patent 6,526,506 to Lewis (hereinafter referenced as "*Lewis*"); and U.S. Patent Application Publication No. 2004/0081320 to Jordan et al. (hereinafter referenced as "*Jordan*"); U.S.

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Patent 7,293,289 to Loc et al. (hereinafter referenced as "*Loc*"); and U.S. Patent 6,118,869 to Kelem et al. (hereinafter referenced as "*Kelem*").

Rejection of Claims 1, 7-8 and 13 under 35 U.S.C. §103

Claims 1, 7-8 and 13 stand rejected under 35 U.S.C. §103 as being unpatentable over Lewis in view of Jordan. This rejection is respectfully traversed.

Claims 1 and 8 are independent claims. Claim 1 is a method claim, whereas claim 8 is an apparatus claim. Each of claims 1 and 8 recites substantially similar limitations which will be discussed below. It will be understood that, for the sake of brevity of this response, the remarks below are intended to pertain to all the independent claims that include such similar limitations without further repetition of the remarks.

As amended, claim 1 clearly states that each operation of the recited method is performed by the access point. Lewis clearly shows an access point in his figures, yet many of the operations dealing with key generation and key storage of change are performed by another entity outside the defined "access point" of Lewis. That outside entity is defined by Lewis as a key distribution server. According to the present Office Action, the Examiner has combined the functionality of Lewis's key distribution server with functionality of Lewis's access point in attempting to achieve allegedly the functionality presented in Applicants' claims. But the combination of Lewis's two elements is improper.

The combination of Lewis's key distribution server with Lewis's access point is improper because the key distribution server performs functions for all the access points not just one access point. The key distribution server is not dedicated to one access point. Instead, it is connected to a backbone or bus to which all the access points are connected. When encryption keys are requested, the key distribution server serves any and all the access points. In this way, Lewis has produced a highly centralized key distribution system as opposed to the decentralized system achieved by Applicants' claimed invention in which all the encryption key operations are expressly performed by the access point alone without any external intervention.

The benefits achieved by Applicants' decentralized approach over Lewis's centralized approach are that: fewer elements are required to perform all the encryption key related functions, no client-server relationships and functions are needed to handle the encryption key

related functionality, and security is improved because encryption key information is self-contained within the access point as opposed to being available to any entity attempting to intercept bus or backbone communications between Lewis's key distribution server and access points.

The combination of Lewis's elements is also improper because Lewis clearly and expressly teaches an access point and a key distribution server as separate entities. Lewis does not suggest that these separate entities should be combined in the manner suggested by the Examiner. In fact, if the combination of the key distribution server and one access point were carried out, that combination would undoubtedly destroy the necessary relationships between Lewis's key distribution server and the other access points because the server would be captive to the one solitary access point. Lewis's system would then fail to operate as intended.

Finally, the combination ignores the simple fact that Lewis has already defined an access point with certain functionality that does not include the functionality present in the key distribution server. Applicants' claims call for operations in the method to be performed at the access point. Applicants' access point and Lewis's access point are intended to be analogous from a comparative point of view, albeit different in their internal architecture and functionality. It is improper to ignore the express teachings of Lewis, which explain what functions he intends his access point to perform, in order to reject limitations in the claims. Since Lewis clearly defines his access point, any comparison to Applicants' claims should be restricted solely to Lewis's teachings about the access point alone, not to any entity external to his access point and not to any entity that Lewis himself did not suggest subsuming into the access point.

Jordan fails to cure the defects discussed in the prior responses with respect to the teachings of Lewis. Also, the combination of Lewis and Jordan is inappropriate because Jordan does not teach or suggest any device that even remotely resembles an access point. Jordan shows a system in Figure 1, which lacks a device called or resembling a wireless access point. Although it has been suggested in the Office Action that the messaging gateway 115 of Jordan is analogous to Applicants' access point, the analogy fails because the messaging gateway of Lewis is not in communication with any user. Jordan's messaging gateway 115 is separated from the user (i.e., Jordan's wireless devices 130 or 135) by a number of different system devices. These different system devices are interposed along the communication path from the user and the

gateway so that the user is not in direct communication with the gateway. Applicants call at least for "communicating the newly generated encryption key **from the access point directly to the station** in an encrypted form using the old encryption key", as defined in claim 1 and shown in Applicants' Figure 1. Jordan's only shows a communications tower 125 and a loader 175 directly communicating with the two different wireless devices. If Jordan's messaging gateway is intended to be analogous to an access point, then it fails to teach or suggest Applicants' claimed limitation. Thus, the combination of Jordan and Lewis does not teach the limitations in claim 1.

Lewis cannot logically teach the elements asserted by the Examiner in the present Office Action. It has been admitted in the present Office Action that Lewis fails to teach the claimed limitation for, "resetting at the access point the old encryption key to equal an encryption key being used by a station in communication with the access point". Then it is asserted in the same Office Action that Lewis teaches the very next limitation of, "communicating the newly generated encryption key from the access point directly to the station in an encrypted form using the old encryption key". But this assertion fails because these two claimed limitations are logically and inextricably connected through at least their dependence on the "old encryption key". In the first step, which is admitted as <u>not</u> being taught be Lewis, the old encryption key is reset. Since Lewis does not teach this step, Lewis cannot have a key of any kind that even remotely resembles Applicants' old encryption key that has been reset to the encryption key being used by the station communicating with the access point. In turn, without this old encryption key as defined in the claim, Lewis is unable to communicate a key that is in an encrypted using the old encryption key. Lewis admittedly has no encryption key that has the same properties of the old encryption key defined in the resetting step – the very step which the USPTO admits is lacking in Lewis. Thus, Lewis cannot communicate a newly generated key in an encrypted form using the old encryption key. Hence, it is submitted that Lewis does not teach all the limitations of the claims.

For all these reasons, it is believed that the combination of Lewis and Jordan fails to teach, show, or suggest all the limitations defined in claim 1 and claim 8.

In light of all the remarks above, it is submitted that the limitations of independent claims 1 and 8 and the claims dependent thereon would not have been obvious to a person of

ordinary skill in the art upon a reading of Lewis and Jordan, either separately or in combination. Thus, it is believed that claims 1, 7-8 and 13 are allowable under 35 U.S.C. §103. Withdrawal of this rejection is respectfully requested.

Rejection of Claims 3-4, 9 and 14 under 35 U.S.C. §103

Claims 3-4, 9 and 14 stand rejected under 35 U.S.C. §103 as being unpatentable over Lewis and Jordan in view of Loc. This rejection is respectfully traversed.

Claims 3-4 and 14 depend ultimately from independent base claim 1 and claim 9 depends from independent base claim 8. It should be understood that the cited dependent claims include all the limitations from their respective base independent claims and also include additional limitations over those presented in the base claims.

The patentability of the base independent claims has already been discussed above and will be understood to be incorporated herein without further repetition, except to repeat that the combination of Lewis and Jordan fails to teach, show, or suggest all the elements of the base independent claims. Loc was introduced because it was stated that the combination of Lewis and Jordan failed to disclose the operation of an encryption failure counter, whether incrementing or resetting to zero. Since there is no additional showing in Loc to cure the deficiencies in the teachings of Lewis and Jordan as described above, it is submitted that the combination of Lewis, Jordan, and Loc fails to disclose or suggest all of the elements of claims 3-4, 9 and 14.

In light of the remarks above and because of the dependence on the independent base claims discussed above, it is believed that the elements of dependent claims 3-4, 9 and 14 would not have been obvious to a person of ordinary skill in the art upon a reading of Jordan, Lewis, and Loc, either separately or in combination. Thus, it is submitted that claims 3-4, 9 and 14 are allowable under 35 U.S.C. §103. Withdrawal of this rejection is respectfully requested.

Rejection of Claims 5-6 and 10-12 under 35 U.S.C. §103

Claims 5-6 and 10-12 stand rejected under 35 U.S.C. §103 as being unpatentable over Lewis and Jordan in view of Kelem. This rejection is respectfully traversed.

Claims 5 and 6 depend ultimately from independent base claim 1 and claims 10-12 depend from independent base claim 8. It should be understood that the cited dependent claims include all the limitations from their respective base independent claims and also include additional limitations over those presented in the base claims.

The patentability of the base independent claims has already been discussed above and will be understood to be incorporated herein without further repetition, except to repeat that the combination of Lewis and Jordan fails to teach, show, or suggest all the elements of the base independent claims. Kelem was introduced because it was stated that the combination of Lewis and Jordan failed to disclose setting the encryption key to a null value. Since there is no additional showing that Kelem cures the deficiencies of Lewis and Jordan as described above, it is submitted that the combination of Lewis, Jordan, and Kelem fails to disclose or suggest all of the elements of claims 5-6 and 10-12.

In light of the remarks above and because of the dependence on the independent base claims discussed above, it is believed that the elements of dependent claims 5-6 and 10-12 would not have been obvious to a person of ordinary skill in the art upon a reading of Jordan, Lewis, and Kelem, either separately or in combination. Thus, it is submitted that claims 5-6 and 10-12 are allowable under 35 U.S.C. §103. Withdrawal of this rejection is respectfully requested.

Conclusion

     In view of the foregoing, it is respectfully submitted that all the claims pending in this patent application are in condition for allowance. Entry of this amendment, reconsideration of the application, and allowance of all the claims are respectfully solicited.

     If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner contact the Applicants' attorney, so that a mutually convenient date and time for a telephonic interview may be scheduled for resolving such issues as expeditiously as possible.

Respectfully submitted,

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